(d) if so, the details thereof, with regard to the measures to be taken; and

(e) if not, the reasons therefor?

THE MINISTER OF AGRICULTURE (SHRI SHARAD PAWAR): (a) and (b) Samba Mahsuri (BPT-5204) is already released and popular rice variety occupying a sizable area and being grown by a large number of farmers in the country. Bacterial Leaf Blight resistance genes (Xa21, xa5 and xa 13) have been transfered into this popular variety jointly by Directorate of Rice Research and Centre for Cellular and Molecular Biology bsed in Hyderabad. These new lines of Samba Mahsuri carrying the above genes are under testing.

(c) and (d) The developed rice lines with bacterial leaf blight resistance genes in the background of Samba Mahsuri are being evaluated across the country under All India Coordinated Rice Improvement Project (AICRIP) trials for resistance, yield and quality traits. The availability of these lines to the farmers will depend on their performacne for various traits, their identification and release by Central/State Varietal Release Committee.

(e) Not Applicable.

**Harnessing rain water for cultivation**

1822. SHRI RAJKUMAR DHOOT: Will the Minister of AGRICULTURE be pleased to state:

(a) whether it is a fact that Government have asked the farmers to harness rain water for cultivation;

(b) whether Government have identified the areas where rain water can be conveniently harnessed and gainfully utilized;

(c) if so, the details thereof;

(d) whether Government will provide some financial help or incentives to farmers for the purpose; and

(e) if so, the details thereof?

THE MINISTER OF AGRICULTURE (SHRI SHARAD PAWAR): (a) to (e) Rainwater harvesting and its utilization in agriculture is an age old

practice. However, the need and importance of water conservation and water harvesting has been stressed in the National Water Policy and National Agricultural Policy of Government of India.

Now peoples' participation in rainwater harvesting and its optimal utilization is advocated and practised in the schemes being implemented at Government of India level. Accordingly, farmers are motivated to harness rainwater for cultivation through training programmes. The following schemes implemented by the Ministry of Agriculture and Ministry of Rural Development during Tenth Five Year Plan emphasize the above aspect.

**Ministry of Agriculture**

1. National Watershed Development Project for Rainfed Areas (NWDPRA)
2. River Valley Project and Flood Prone River (RVP & FPR)
3. Watershed Development Project for Shifting Cultivation areas (WDPSCA)

**Ministry of Rural Development**

1. Drought Prone Area Programme (DPAP)
2. Integrated Wasteland Development Project (IWDP)
3. Desert Development Project (DDP)

Various soil and water conservation measures for treatment and development of the area on watershed development approach are taken up under above programmes. Rainwater harvesting is an integral part of water conservation programmes, which is taken up as per technical needs of the watershed development. The area treated under the above schemes/ programmes since inception till the end of 2004-05 is furnished in enclosed Statement-I (*See* below). For the farmers, all the above schemes are of grant based ones.

The rainwater harvesting structures recommended for different agro-climatic zones are given in the enclosed Statement-II (*See* below).

## *Statement-I*

*Area developed and amount invested under various Watershed Development Programmes, since Inception upto March, 2005*

(Area: in lakh hectare; Expenditure: Rs. in crores)

| Sl. No. | Ministry/Scheme and year of start | Area treated and Expenditure since inception up to Ninth Plan | | Area treated and Expenditure in first 3 years of Tenth Plan (2002-05) | | Total area treated and Expenditure since inception upto March 2005 | |
|---|---|---|---|---|---|---|---|
| | | Area. | Expenditure | Area. | Expenditure | Area. | Expenditure |
| **(A)** | **Ministry of Agri., Department of Agri. Coopn.** | | | | | | |
| 1 | NWDPRA (1990-91) | 69.79 | 1877.74 | 9.55 | 519.82 | 79.34 | 2397.56 |
| 2 | RVP & FPR (1962 & 81) | 54.88 | 1516.26 | 5.99 | 377.91 | 60.87 | 1894.17 |
| 3 | WDPSCA (1974-75) | 2.58 | 166.27 | 0.6 | 60.16 | 3.18 | 226.43 |
| | Sub Total (A) | 127.25 | 3560.27 | 16.14 | 957.89 | 143.39 | 4518.16 |
| **(b)** | **Ministry of Rural Development (Department of Land Resources)** | | | | | | |
| 1 | DPAP (1973-74) | 13.79 | 897.2 | 12.5 | 844.99 | 26.29 | 1742.79 |
| 2 | DDP (1977-78) | 6.7 | 686.04 | 8 | 614.78 | 14.7 | 1300.82 |
| 3 | IWDP (1988-89) | 37.36 | 598.12 | 24.6 | 849.9 | 61.96 | 1448.02 |
| | Sub Total (B) | 57.85 | 2181.36 | 45.1 | 2309.67 | 102.95 | 4491.63 |
| | TOTAL (A+B) | 185.1 | 5741.63 | 61.24 | 3267.56 | 246.34 | 9009.79 |

Details of abbreviations:

| | |
|---|---|
| NWDPRA | National Watershed Development Project for Rainfed Areas |
| RVP & FPR | River Valley Project & Flood Prone River |
| WDPSCA | Watershed Development Project for Shifting Cultivation Areas |
| DPAP | Drought Prone Area Programme |
| DDP | Desert Development Programme |
| IWDP | Integrated Wasteland Development Project |

***Statement-II***

*Rain water harvesting structures in different agro-climatic zones*

| Sl. No. | Agro-climatic zone | Water Harvesting Structure | Recommendations |
|---|---|---|---|
| 1. | Humid north-western Himalayas | (i) Roof water harvesting<br>(ii) Diversion of perennial springs & streams in storage structures<br>(iii) Village pond<br>(iv) Collection from hill slope | Improvement in roof structures and use of proper material such as corrugated sheets for generating higher runoff and with arrangement of foul slush diversion system and proper storage structure for checking water from contamination. |
| 2. | Himalayan foot hills | (i) Collections from hill slope<br>(ii) Village ponds<br>(iii) Roof water harvesting<br>(iv) Interflow harvesting | Improvement in roof top harvesting system as above |
| 3. | Humid high rainfall north eastern zone | (i) Roof water harvesting<br>(ii) Diversion of perennial springs & streams in a storage structure (tank) | —do— |
| 4. | Humid Assam Bengal plains | (i) Tank<br>(ii) Anicut/check dam<br>(iii) Gully plugging<br>(iv) Contour bunding | Improved design of tank for minimising evaporation and seepage losses, control of sediment load and water pollution |
| 5. | Sub-humid & humid Satluj Ganga Alluvial Zone | (i) Pond<br>(ii) Check dam<br>(iii) Gully plugging<br>(iv) Contour bunding | —do— |

| 1 | 2 | 3 | 4 |
|---|---|---|---|
| 6. | North-western semi-arid & arid Zone | (i) Nadi<br>(ii) Tanka<br>(iii) Khadin<br>(iv) Percolation tank<br>(v) Anicut<br>(vi) Gully plugging<br>(vii) Contour bunding<br>(viii) Roof harvesting | (i) Adoption of improved design of Nadi and Tanka<br>(ii) Sand filled reservoir<br>(iii) Sub-surface barrier<br>(iv) Flat batter tank |
| 7. | Central semi-arid Vidhyan zone | (i) Pond<br>(ii) Check dam<br>(iii) Contour bunding<br>(iv) Guliy plugging<br>(v) Sub-surface dykes | —do— |
| 8. | High rainfall high runoff Chhotanagpur plateau | Same as 4 | —do— |
| 9. | Assured rainfall deep black soil malwa plateau & Narmada basin | (i) Ponds<br>(ii) Check dams<br>(iii) Sub-surface dams | Improvement of existing systems |
| 10. | Variable rainfall south central plateau zone | (i) Pond<br>(ii) Check dam<br>(iii) Percolation tank<br>(iv) Bandhara<br>(v) Gully plugging<br>(vi) Sub-surface dam<br>(vii) Contour bunding | (i) Flat batter tank<br>(ii) Selection of suitable site and improvement of existing system, better water management |
| 11. | Chhattisgarh plateau zone | Same as 10 | Same as 10 |
| 12. | South-eastern brown/red soil zone | Ponds/Tanks<br>Percolation Tanks<br>Sub surface dams | Improvement of existing systems |

| 1 | 2 | 3 | | 4 |
|---|---|---|---|---|
| 13. | Southern variable rainfall, mixed soil zone | (i)<br>(ii)<br>(iii)<br>(iv)<br>(v)<br>(vi) | Pond/tanks/kunta<br>Nadi<br>Check Dam<br>Percolation Tank<br>Sub-surface Dam<br>Gully plugging | (i) Flat batter tank<br>(ii) Selection of suitable site and<br>(iii) Improvement of existing system for better water management |
| 14. | Southern bi-modal rainfall zone | (i)<br>(ii)<br>(iii)<br>(iv)<br>(v) | Ponds/tanks<br>Percolation tanks<br>Gully plugging<br>Contour bunding<br>Check dams | Improvement of existing systems |
| 15. | Eastern Coromandal | (i)<br>(ii)<br>(iii)<br>(iv)<br>(v)<br>(vi) | Pond/tank/kunta<br>Nadi<br>Check dam<br>Percolation tank<br>Sub-surface dam<br>Gully plugging | (i) Adoption of improved design of Nadi and tank<br>(ii) Selection of suitable sites and improvement of existing system for better water management |
| 16. | Western Malabar | (i)<br>(ii)<br>(iii)<br>(iv)<br>(v)<br>(vi)<br>(vii) | Pond/tank/kunta<br>Check dam<br>Percolation tank<br>Contour bunding<br>Bandhara<br>Kolhapur type weirs<br>Sub-surface dam | (i) Improvement in existing system, better water management<br>(ii) Construction of structures at suitable sites |

## Vegetable prices

1823. SHRI SK. KHABIR UDDIN AHMED: Will the Minister of AGRICULTURE be pleased to state:

(a) whether Government are aware of high prices of vegetables in the market; and

(b) the action being taken to bring down the prices?